DAY CARE LIMITED REVIEW
(Renovations to Existing Buildings Only)
Licensed For 25-99 Children and 2,000 - 5,000 Gross Square Feet

Plans have been reviewed for compliance with the 1999 Standard Building Code, 1997 Standard Mechanical Code, 2003 National Fire Codes (NFPA Standards), 2003 NFPA 101 *Life Safety Code*, and the 1974 State Public Building Accessibility Act (2002 North Carolina Accessibility Code with the 2004 Amendments). The following list does not necessarily include all deficiencies. See additional items on the cover sheet.

PLEASE NOTE: Listed items require correction by revised plans, addenda, field orders, or change orders before plans can be approved for construction. Answers in letter form are not acceptable. **Starting construction before plans approval may be considered as just cause, by the State, to issue a stop work order. [Rule 0780-2-3-.02(1)]**

I. PROCEDURES

1. Provide two copies of current plans and one copy of specifications stamped (sealed with signature and date) by a registrant in accordance with the Architects and Engineers Licensing Law Rules. [Rule 0780-2-3-.03 and A&E Rule 0120-2-.08(3)]

*2. Provide a second set of sealed final plans and revisions for the job site set. [Rule 0780]

3. Buildings must be designed to the minimum State of Tennessee adopted codes and standards.

   Provide the following code information on the cover sheet of the plans for new and existing buildings:

   a. SBCCI Standard Building Code, 1999 edition, including SBCCI Standard Gas Code, 1999 edition, and SBCCI Standard Mechanical Code, 1997 edition

   b. Uniform Fire Code (NFPA 1), 2003 edition, including each reference in NFPA 1, Chapter 2 (excluding NFPA 5000), published by the National Fire Protection Association. Each reference in NFPA 1 Uniform Fire Code, Chapter 2 to an NFPA code or standard shall be deemed to be the edition printed in the National Fire Codes, 2003 edition

   c. 1974 State Public Building Accessibility Act (2002 North Carolina Accessibility Code with the 2004 Amendments)

   d. Occupancy Group per Chapter 6, NFPA 101, 2003 edition

   e. Identify whether there is a proposed change of occupancy for this project. Show previous and proposed occupancies

   f. Construction Type, protected or unprotected, sprinklered or unsprinklered per Chapter 6, 1999 SBC

   g. Number of stories, and/or height of building

   h. Area of building according to SBC Table 500 for new and existing. Show building area increase calculations per SBC 503.3

4. For how many clients will this day care facility be licensed? Will this project meet state adopted accessibility codes? Show this information on cover sheet of plans.

5. Provide a summary statement explaining the project's scope of work on the design drawing that shows the project's codes analysis.

6. Complete the Plans Review Submittal Form (PRSF) and remit the required fee. [Rule 0780]

7. The fee has been calculated incorrectly. Balance due is _____. We are refunding _____. The refund process takes approximately 6 to 8 weeks.

8. A Codes Enforcement Officer will inspect the existing building and issue an inspection report. Deficiencies found must be addressed prior to a Certificate of Occupancy being issued. [Rule 0780-2-3-.10]

9. Prior to any approval being granted, items with an asterisk (*) must be resolved.

10. **NOTE: In order to expedite processing of this project, please refer to "TFM NUMBER" on transmittal letter when submitting any correspondence, plans, specifications, etc. TFM #_____**

II. GENERAL

1. Identify use of rooms and spaces.

2. Provide door and door hardware schedule and glazing schedule with sizes and types. Latching door hardware (interior and exterior) must meet NCAC 7.9 (if required to be handicapped accessible).

3. Provide interior finish schedule. Interior finish throughout must be Class A or B. [NFPA 101 10.2 and 16.3.3]

4. Provide legend for all fire rated wall enclosures to identify specific ratings and their limits (i.e., smoke partitions or barriers, 30 minute, one, two, and four-hour fire ratings).

5. Carpet in means of egress must withstand 0.22 watts/cm^2 Radiant Panel Test (Class II). [SBC 803.8.2, NFPA 101 16.3.3.3, 10.2.7.1, and 10.2.7.2]

6. FIRE STOPPING Specify test number, hourly rating, and provide detail(s) in their entirety which include application instructions, material specifications and design illustrations without modification or manipulation directly on plans of current U.L. (or other approved third party nationally recognized testing laboratory) tested systems for each size and type of penetrating object such as metallic and nonmetallic electrical, plumbing, HVAC piping and ductwork, fire protection piping, electrical wiring, or conduit through fire resistive assemblies SBC 705.4 and NFPA 101 8.3.5. The details must be provided directly in the plan set and not in Architectural Supplemental Instruction (ASI), addenda, or within the specifications or project manual. Provide plumbing details for toilet, shower, and tub penetrations at 1-hour fire rated floor assemblies and plumbing penetrations within walls when penetrating 1-hour rated floor assemblies. UL permits the free duplication and inclusion for design professionals in their designs (see "Important Information For Users Of This Directory, Use of This Directory" in Volume 1 of the most recent printed Fire Resistance Directory - or - at the bottom of each "record" (i.e., UL system number) on the online certification directory available http://www.ul.com for UL's terms and conditions of use).

7. WALLS, CEILINGS, FLOOR/CEILING AND ROOF ASSEMBLIES Show what UL or other assembly number is being used for the fire-rated roof/ceiling, floor/ceiling, and wall assemblies. [SBC 701.2] Specify that all component parts comply with tested assemblies. Provide detail(s) in their entirety which include design illustrations and material specifications without modification or manipulation directly on plans of current U.L. (or other approved third party nationally recognized testing laboratory) tested assembly. The details must be provided directly in the plan set and not in Architectural Supplemental Instruction (ASI), addenda, or within the specifications or project manual. UL permits the free duplication and inclusion for design professionals in their designs (see "Important Information For Users Of This Directory, Use of This Directory" in Volume 1 of the most recent printed Fire Resistance Directory - or - at the bottom of each "record" (i.e., UL system number) on the online certification directory available http://www.ul.com for UL's terms and conditions of use).

8. Provide a reflected ceiling plan showing lights, diffusers, sprinkler head, smoke detector, etc.

9. Provide design live load values on plans for wind, roof, floor, stairs, guard and hand railings, seismic per SBC 1607.1.2, etc. [SBC Chapter 16] For existing buildings that have not been reviewed and approved by our office, provide "as built" plans from a Tennessee licensed structural engineer or an evaluation report sealed, signed, and dated from a Tennessee licensed structural engineer. The evaluation report must show the design live loads for wind, roof, floors, stairs guard, hand railings, and seismic.

III. SITE

1. If this building will be licensed for handicapped children, provide a site plan showing accessibility from a designated parking space (96 inches wide plus 60 inches wide aisle and above ground sign) to the primary entrance with any curb cuts, ramps, etc. [NCAC 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 4.4, and 4.6] See **ACCESSIBILITY CORRECTION LIST** for restroom and additional requirements.

IV. CONSTRUCTION

1. Show a _____ hour fire rated occupancy separation between _____ and _____ occupancies. [SBC 303.1 and Table 704.1] In buildings with usable craw spaces tenant separation shall extend from underside of floor to ground below unless the floor is a one hour fire rated assembly. [SBC 704.3.2]

2. Glazing in non-rated doors, sliding doors, storm doors, within 24 inches of doors, within 18 inches above finished floor, and exceeding 9 square feet within 36 inches of walking surface must be safety glazed, tempered, and pass the test requirements of CPSC 16-CFR, part 1201 and comply with ANSI Z97.1. [SBC 2405.1 and .2]

3. Glazing in rated doors must be wired glass or other tested glazing material and limited in size according to door rating. [SBC 705.1.3.6]

4. Specify that fire rated doors must have fire rated frames, hardware, closers, and other rated accessories. [1999 NFPA 80 1-4 Definition of "Fire Door," NFPA 80 1-6.1, 2-4.7, and SBC 705.1.3]

5. Rooms 50 square feet and more used for storage must be one hour enclosed with ¾-hour rated doors and hardware **or** protected by automatic sprinklers with smoke tight enclosure and solid doors with self-closers. [NFPA 101 16.3.2.1, 8.4, and 9.7.1]

6. Janitor's closet must be one hour enclosed with ¾-hour door assembly **or** protected by automatic sprinklers with smoke tight partitions and solid doors with self-closers. [NFPA 101 16.3.2.1, 8.4, and 9.7.1]

7. Fuel fired water heaters with an aggregate input capacity that exceeds 200,000 BTU or 210°F or 120 gallons must be one hour enclosed with ¾-hour fire rated door assemblies **or** protected by automatic sprinklers with smoke tight enclosure. [NFPA 101 16.3.2.1, 8.4, 9.7.1, and SMC Definition of Boiler]

8. Fuel fired furnace rooms must be one hour enclosed with ¾-hour fire rated door assemblies **or** protected by automatic sprinklers with smoke tight partitions. [SBC 704.1.3.3, NFPA 16.3.2.1, 8.4, and 9.7.1]

9. Fire rated walls must extend tight against the underside of a roof or floor deck or to the underside of a rated smoke tight ceiling which has the same rating as the wall (e.g., two layers of 5/8 inch rated gypsum panels at the ceiling for tenant separation, one hour storage or janitor spaces, and one or two hour fire rated walls turned horizontally and anchored to the walls for corridors, elevator, stair, and breezeway ceilings). [NFPA 101 8.2.2.3] Provide details.

10. Provide one/two hour separation to maintain floor-to-floor separation. One hour fire rated floor/ceilings are required in existing two story houses converted into day care centers. Provide a one-hour fire rated separation with 1-hour rated door assemblies at lower or upper floor stair systems. [Agreement with DHS and C&I)

11. Provide attic access openings (22 inches by 36 inches) and attic ventilation within each draft stop area. [SBC 2169.6 and 2169.7]

12. Show draft stopping of attic area in type V and VI construction. Specify material to be used. [SBC 2305.2.3]

13. Dead ends may not exceed 20 feet. [SBC Table 1004, SBC 1005.2, and NFPA 101 16.2.5.2]

14. Closet door latches must comply with NFPA 101 16.2.2.2.4.

15. Bathroom door locks must comply with NFPA 101 16.2.2.2.5.

V. MEANS OF EGRESS

1. Stair enclosure must be one/two hour fire rated. [SBC Table 705.1.2 and NFPA 101 7.1.3.2] Exterior stairs must be separated from the interior of the building with the same rating required for interior stairs. [SBC 1006.2.4 and NFPA 101 7.2.2.6.3]

2. Stair treads must be a minimum 11 inches and risers a maximum of seven inches, but not less than four inches. Stair nosing must not create a tripping hazard. [NFPA 101 7.2.2.2.1, 7.2.2.3.3, and NCAC 8.2]

3. New Handrails shall be installed to provide a clearance of not less than 2 ¼" between the handrail and the wall to which it is fastened if wall is a rough surface such as cmu block and brick and 1 ½" clearance acceptable for smooth surfaces such as gypsum wallboard. [NFPA 101 7.2.2.4.4.5 and A.7.2.2.4.4.5]

4. Handrails and guards must be in accordance with NFPA 101 7.2.2.4, SBC 1007.5, SBC 1015, and NCAC 8.3 such as 34" minimum to 38" maximum and 42" to top of handrails and guards; handrails on both side of stairs; 23" minimum handrail extension on wall side at bottom of stair; and four inch maximum diameter sphere for intermediate rails in guards. Guards are required on the open side of stairs 30 inches above floor surface. [NFPA 101 7.1.8 and 7.2.2.4]

5. The floor on both sides of any door must be substantially level and may not vary more than ½ inch for a distance at least equal to the width of the widest leaf. [NFPA 101 7.2.1.3 and SBC 1012.1.3]

6. Each leaf of door in the means of egress must provide 32 inches clear opening and a minimum height of 6'-8", but in no case must any single door exceed 48 inches. [NFPA 101 7.2.1.2.4, SBC Table 1004, and 1012.1.1]

7. Emergency windows are required (if unsprinklered and no doors to exterior from each student occupied space) and must provide a clear opening of 20 inches in width, 24 inches in height, 5.7 square feet, and be no more than 44 inches above finished floor. Operable latch must be within 54 inches above finished floor. [NFPA 101 16.2.11.1]

8. Corridors must be one hour fire rated with 20-minute rated door and hardware assemblies. [SBC Table 705.1.2, NFPA 101 7.1.3.1, and NFPA 101 16.3.6] Corridors may be rated at 30-minutes with 20-minute door assemblies in fully sprinklered buildings. [Office Policy] Corridors may be unrated when all student occupied spaces have doors directly to exterior. [SBC Table 704.2.4 and Office Policy]

9. Exits must be remote. [SBC 1004.1.4 and NFPA 101 7.5.4.2]

10. Rooms normally occupied by pre-school, kindergarten, or first grade pupils must not be located above or below the level of exit discharge. Rooms normally occupied by second grade pupils must not be located more than one story above the level of exit discharge. [SBC 1021.1]

VI. MECHANICAL

1. Fire dampers are required where HVAC ducts penetrate 1-hour or more fire rated walls or fire rated or non-rated floors. [SMC 610.1, SBC 705.1.2.2, and 705.6.4.3] Show specific location per SMC 610.6.

2. HVAC systems less than 2,000 CFM, but serving a means of egress must have automatic shutdown. [SMC 406.2] Provide details for situations with and/or without fire dampers.

3. Systems from 2,000 to 15,000 CFM must have a duct mounted smoke detector mounted in the supply duct downstream of all filters (2002 NFPA 90A 6.4.2.1(1)) and in the return air stream prior to any exhausting from the building or mixing with fresh air makeup. [SMC 406.1] These detectors must be wired to a central control panel which is constantly monitored or be wired to a general building alarm. [2002 NFPA 90A 6.4.4]

4. Provide fire/smoke combination dampers in transfer air grille openings through fire rated walls. A smoke damper is required at those openings for unrated walls that must resist the passage of smoke. [NFPA 101 8.4.6.2]

5. An exit access corridor cannot be used for return or exhaust from adjoining air conditioned spaces through louvers or other devices mounted in corridor doors, partitions, or ceilings unless the corridor is designed to comply with SBC 1005.3.2. [SBC 1005.3.1]

6. Provide information showing combustion/ventilation provisions for rooms that contain fuel fire equipment. [SMC 704 and 2002 NFPA 54 8.3] Show size, free area and location of vents (within 12 inches above finished floor and 12 inches below ceiling). Provide ¼ inch mesh non-corrosive exterior screen. [SMC 615]

7. Kitchen commercial cooking exhaust hood and duct system used for the removal of **grease-laden vapor** must comply with 2001 NFPA 96 and SMC 504. Essential features must be described in the specifications or plans and shop drawings must be submitted and approved prior to installation. Hood suppression system must meet UL 300. Shop drawing information is generally a stipulation of the plans approval. Provide hood and duct design intent information. [Rule 0780-2-3-.03(3)]

8. Flexible air-duct connectors must be installed in accordance with manufacturer's instructions (maximum 14 feet in length and not permitted to pass through any wall, shafts, etc., that requires one hour fire resistance. [SMC 604.4]

9. All piping from the "point of service" including underground used for sprinkler system must be installed by a Tennessee registered sprinkler contractor. [Rule 0780-2-7-.08] If there is an existing sprinkler system in the building, a registered sprinkler contractor must inspect, test, and provide a letter of acceptance for the existing system.

VII. FIRE SUPPRESSION

1. Provide sprinkler design intent information by an engineer competent in the design of Fire Protection systems who currently has an active Tennessee registration. The design intent must be approved by the state fire marshal's office prior to shop drawings being created and approved by the fire protection engineer of record. [Rule 0780-2-3-.03(1)(a)]

2. Complete sprinkler shop drawings and associated calculations must be drawn and signed by a Tennessee registered fire protection sprinkler contractor's responsible managing employee. The sprinkler shop drawings and associated calculations must be reviewed and approved by the fire protection engineer of record only after the design intent has been approved by this office. Shop drawing information is generally a stipulation on the plans upon initial approval of the project. [Rule 0780-2-7-.09 and Office Policy]

VIII. ELECTRICAL

1. Provide emergency lighting with emergency power source for corridors and normally occupied windowless spaces. [NFPA 101 16.2.9, 7.9.2, and SBC 1016.2]

2. Emergency lighting must have stand-by power source (NFPA 101 7.9.2, 2002 NFPA 70, Article 700, and SBC 1016.2.1), automatically providing the required illumination in the event of any interruption of normal lighting in areas where emergency lighting is required by SBC 1016 and NFPA 101 7.8, due to any of the following:

   a. Failure of a public utility or other outside electrical power supply.
   b. Opening of a circuit breaker or fuse.
   c. Manual act(s), including accidental opening of a switch controlling normal lighting facilities.

3. Exit signs must be visible from all directions of travel. [NFPA 101 7.10.1.2 and SBC 1016.3.1]

4. Exit signs must have an emergency power source or be a listed self-illuminating type sign. [NFPA 101 7.10.4, SBC 1016.3.5, and 2002 NFPA 70 Article 700.12(e)]

5. A fire alarm system is required with an emergency power source except for centers housed in one room. [NFPA 101 16.3.4.1, 9.6, 2002 NFPA 72 4.1, and SBC 905.1]

6. The fire alarm control panel or an annunciating device must be located in an area where trouble signals can be monitored audibly and visually. [2002 NFPA 72 4.4.3.5 and 4.4.6] This is to be distinguished from a general alarm system.

7. A fire alarm zone indicator panel must be located at grade level at the normal point of fire department access **or** at a constantly attended building security control center. [SBC 905.1.3]

8. The fire alarm must be transmitted directly to a municipal fire department or local fire brigade. [NFPA 101 16.3.4.4 and 9.6.4]

9. Initiation of the fire alarm must be by manual means, by an automatic sprinkler system installed throughout the building, by operation of any required smoke detectors, and required detection devices or systems. [NFPA 101 16.3.4.2, 9.6.2, and SBC 905.1.5.3]

10. Provide manual pulls at doors leading to stair exits, from exterior classroom, gymnasium, and cafeteria doors, and exterior corridor doors. [NFPA 101 16.3.4 and 9.6.2.3]

11. Provide manual pull stations at _____. [NFPA 101 9.6.2.4]

12. Fire alarm occupant notification must be by audible and visible alarm signals. [SBC 905.1.5.2, NFPA 101 9.6.3, and 16.3.4.3]

13. A system of interconnecting smoke detectors is required in front of stairway doors, at 30-foot intervals throughout corridors, in lounges, recreation areas, and sleeping rooms. [NFPA 101 16.3.4.5 and 9.6]

14. In area not continuously occupied that contains controlling equipment, automatic smoke detection must be provided at each control unit(s) (i.e., fire alarm control panel, etc.) Heat detection is permitted if ambient conditions prohibit installation of smoke detection. [2002 NFPA 72 5.6]

15. Provide special protective receptacle covers. [NFPA 101 16.5.1.2]

16. Show the following electrical and fire alarm connections (could be by specifications):

    a. Location of connections of all air handling shutdowns.
    b. Location of connections to the kitchen hood fire extinguishing system that activates the fire alarm system. Show other required shutdowns in the event the extinguishing system is activated.
    c. Location of all connections to shunt trip circuit breakers and gas solenoid valves unless a mechanical gas line shut-off is specified.
    d. Location of flow switch or alarm check valve connection to the general building alarm and central station or fire department.
    e. Location of supervisory alarm connection from tamper switches on sprinkler system.

17. Electrical equipment rated for 1200 amperes or more and over 6 ft wide, containing overcurrent devices, switching devices, or control devices, there shall be one entrance not less than 32 in. wide and 6 ½ ft high at each end of the working space. [NFPA 70 110-26 C(2)] Both entrances shall open in the direction of the egress and be equipped with panic bars, pressure plates, or other devices that are normally latched but open under simple pressure. [2002 NFPA 70 110.26.C(2) and NFPA 101 7.2.1.2.4]

18. Dry-type transformers installed indoors and rated 112 ½ kVA or less shall have a separation of at least 12 in. from combustible material unless separated from the combustible material by a fire-resistant, heat-insulated barrier. [NFPA 70 450.21]

19. Individual dry-type transformers of more than 112 ½ kVA rating shall be installed in a transformer room of minimum 1 hour fire-resistant construction, unless specified otherwise in article 2002 NFPA 70 450.21(B).